



OPERATIONAL RISK MANAGEMENT

“Avoid the distractions of debates on political correctness and focus on the soldiers’ mission, one that remains fixed, determined, inviolable. It is to win our wars.”

“We’re out of the do more with less business. We can do less with less or we can do more with more, but we will no longer do more with less.”

Johnson
College
1995

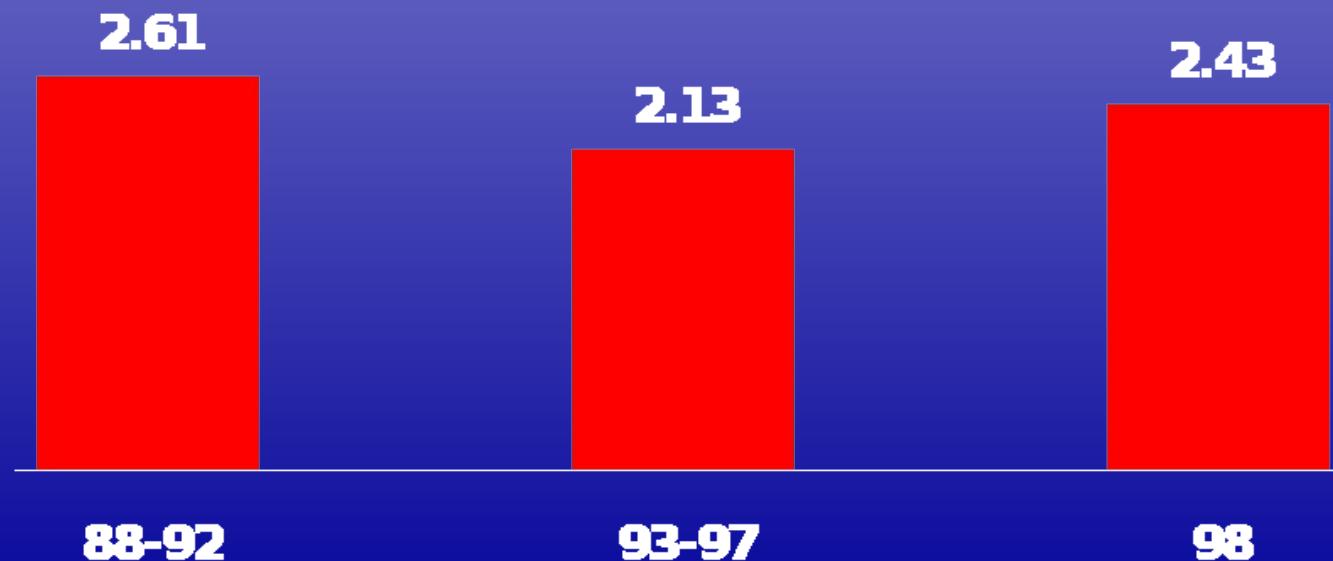
Admiral Jay
Naval War
June,

Naval Aviation Mishap Rate



Navy & Marine Corps Class A Flight Mishaps

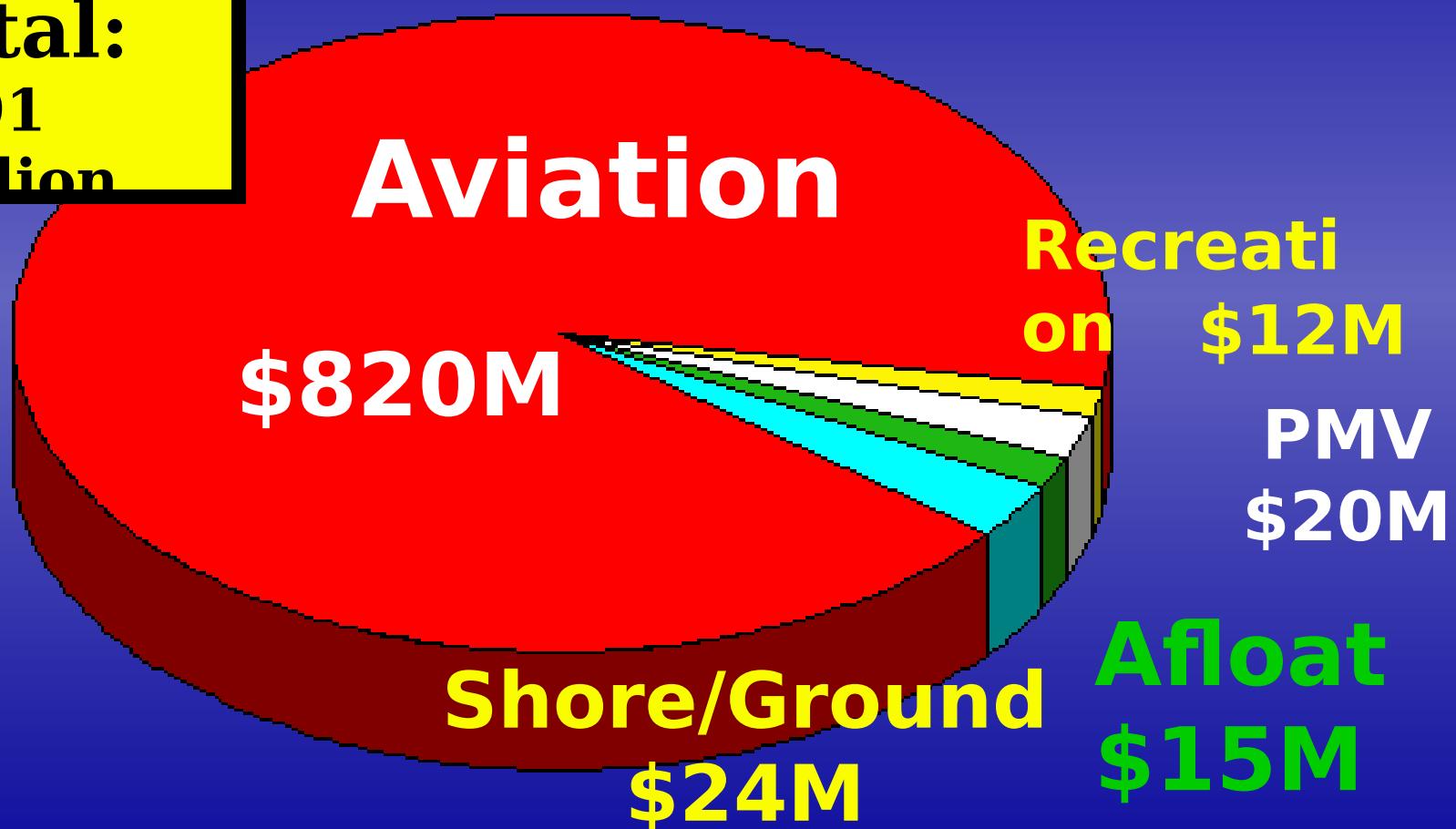
5 year trends indicate a plateau - but FY 98 rate highest since FY 93



Cost of Mishaps

Navy and Marine Corps, FY98

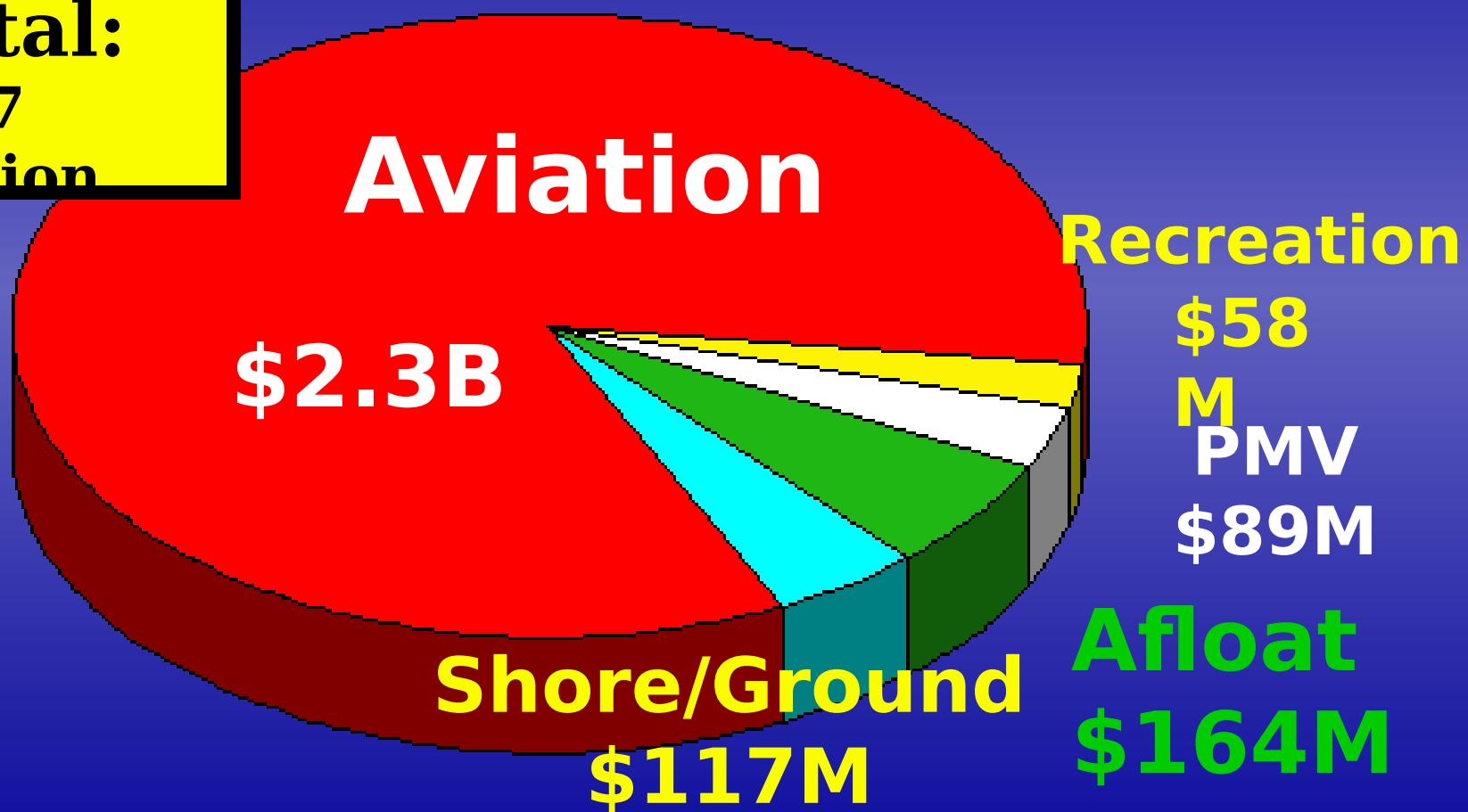
Total:
\$891
Million



Cost of Mishaps

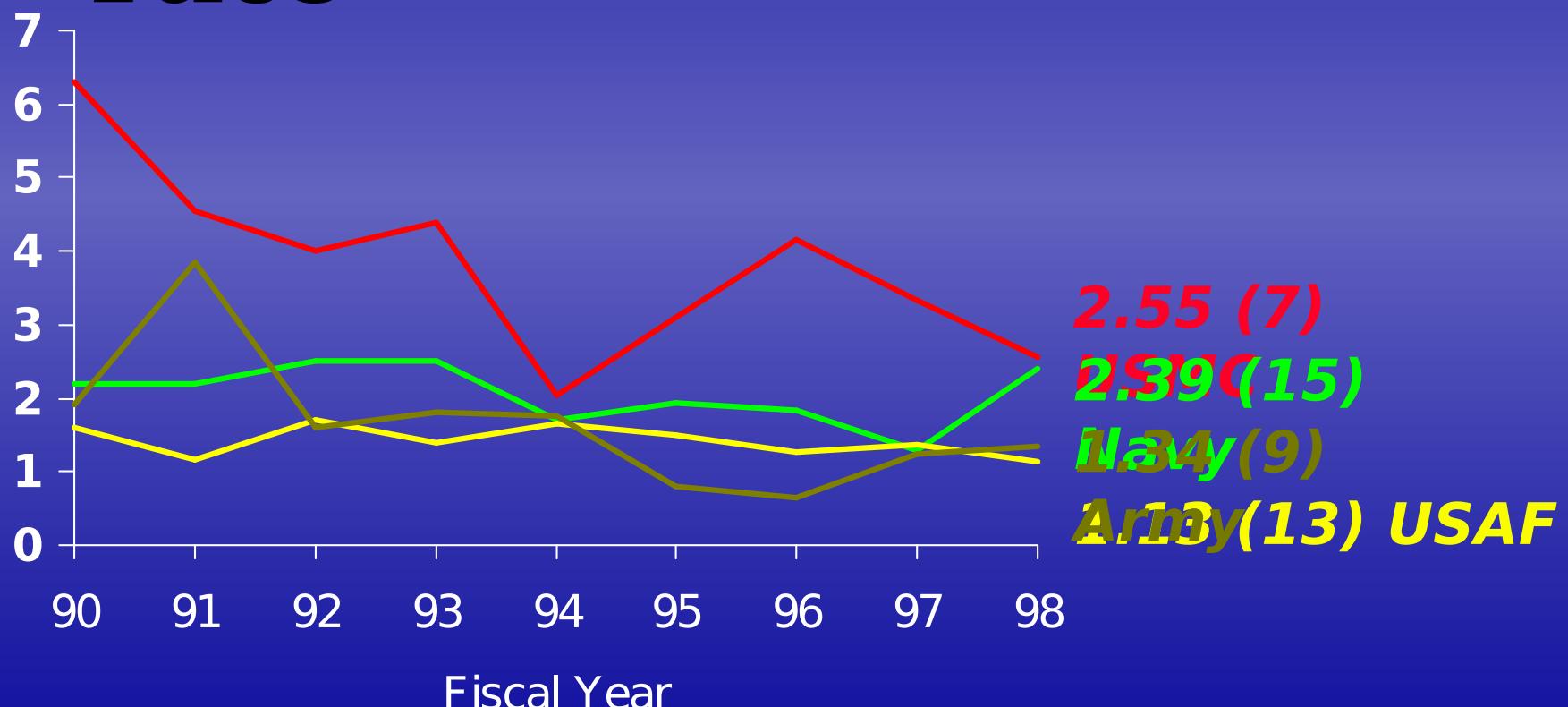
Navy, FY94-98

Total:
\$2.7
Billion



All Services, Class A Flight Mishap

Rates
Marines have highest rate

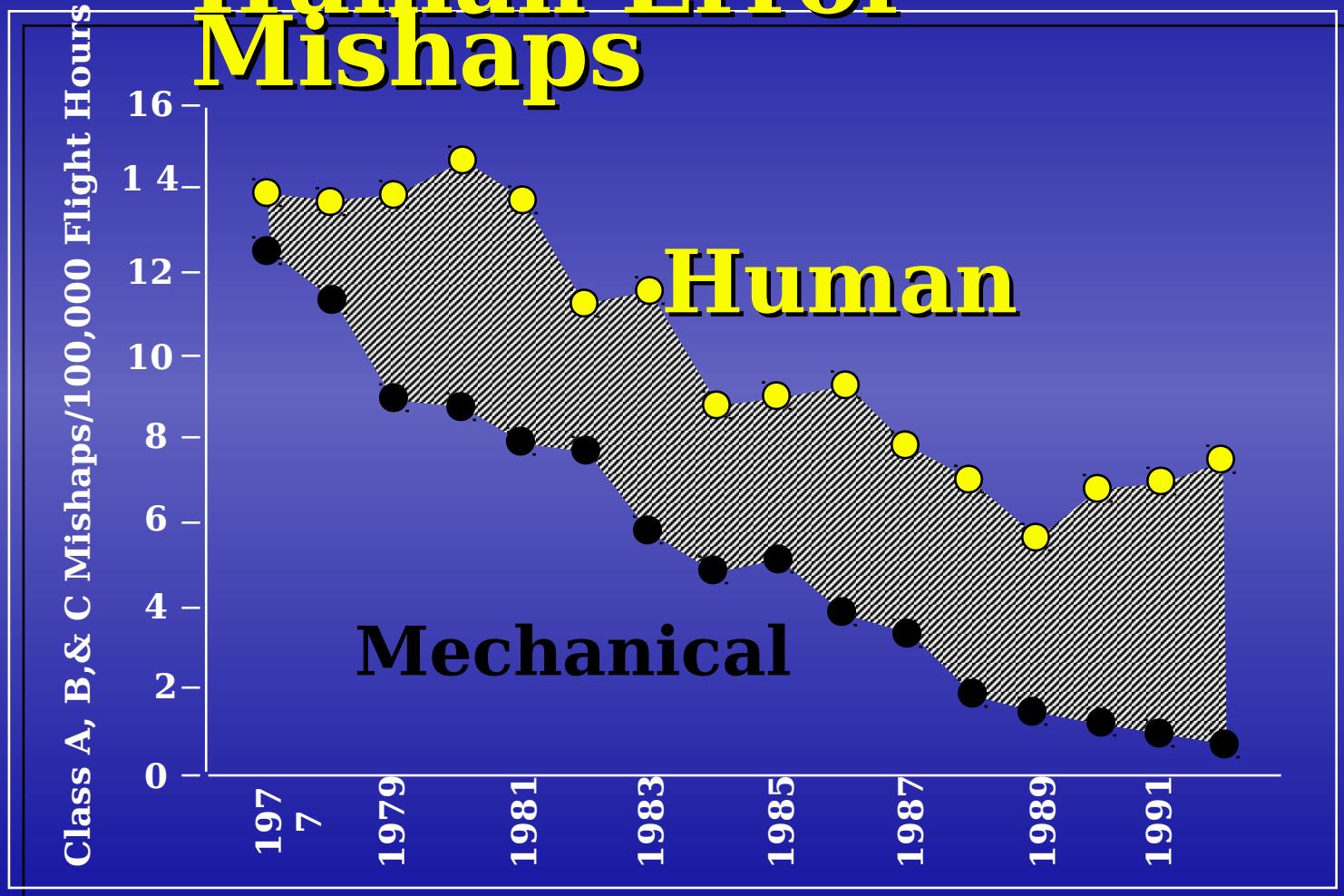


Human Error A Major Problem

4 of every 5 Navy Service
Class A flight
mishaps involve human
error



No Steady Decrease in Human Error Mishaps



All Navy-Marine Corps Mishaps, CY 1977-92



Accide nt

The unplanned result of a behavior that is likely part of an organization's culture

Organizational Culture

*“The way we do things
here”*

- Fundamental building blocks
- Group values and standards
- Medium for growth

Shaped by leadership

**Drives key
decisions**



Desired Cultural Attitudes

- Accountability
- Integrity
- Focus on standards
- Continuous and open communication
- Intolerance for non-compliance
- Consistent decisions

ORM

Process ...
NOT Program



Operational Risk Management

- A Decision Making Tool
- Increases Ability to Make

Informed Decisions

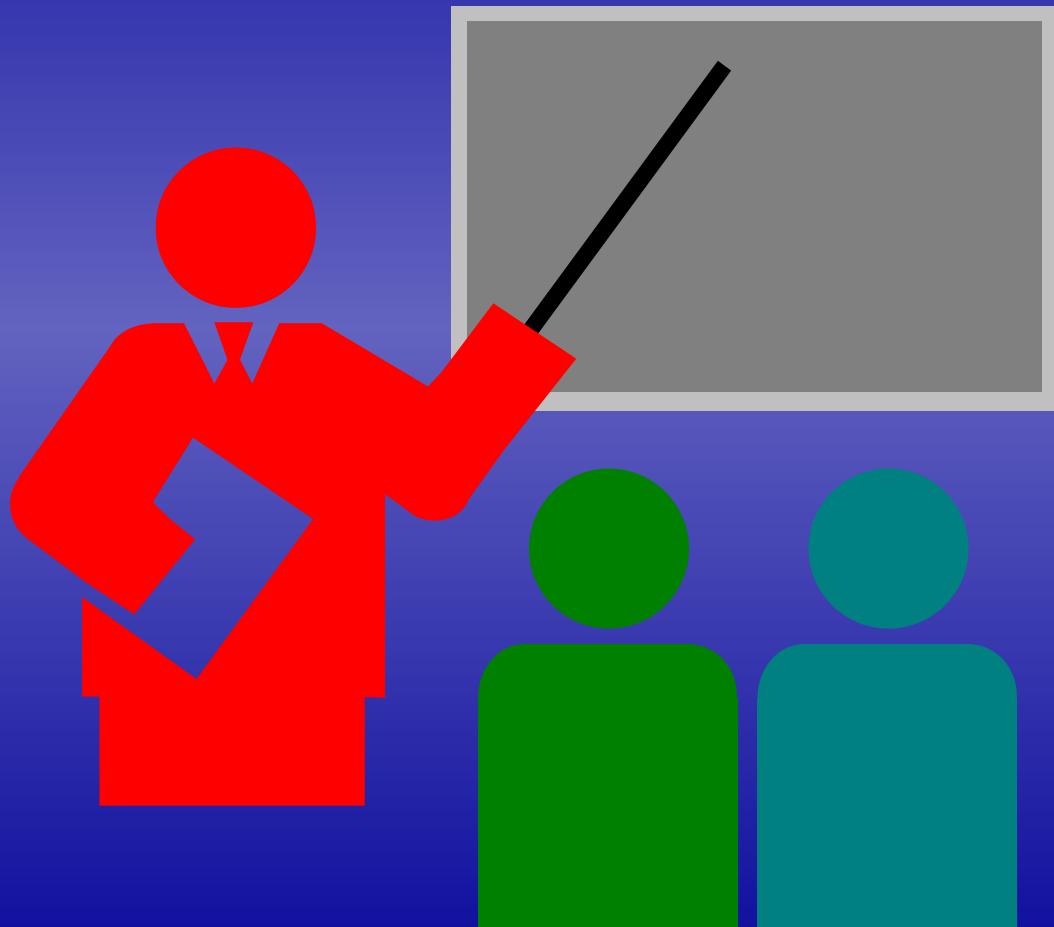
- Reduces Risks to Acceptable Levels

Operational Risk Management

Goal:

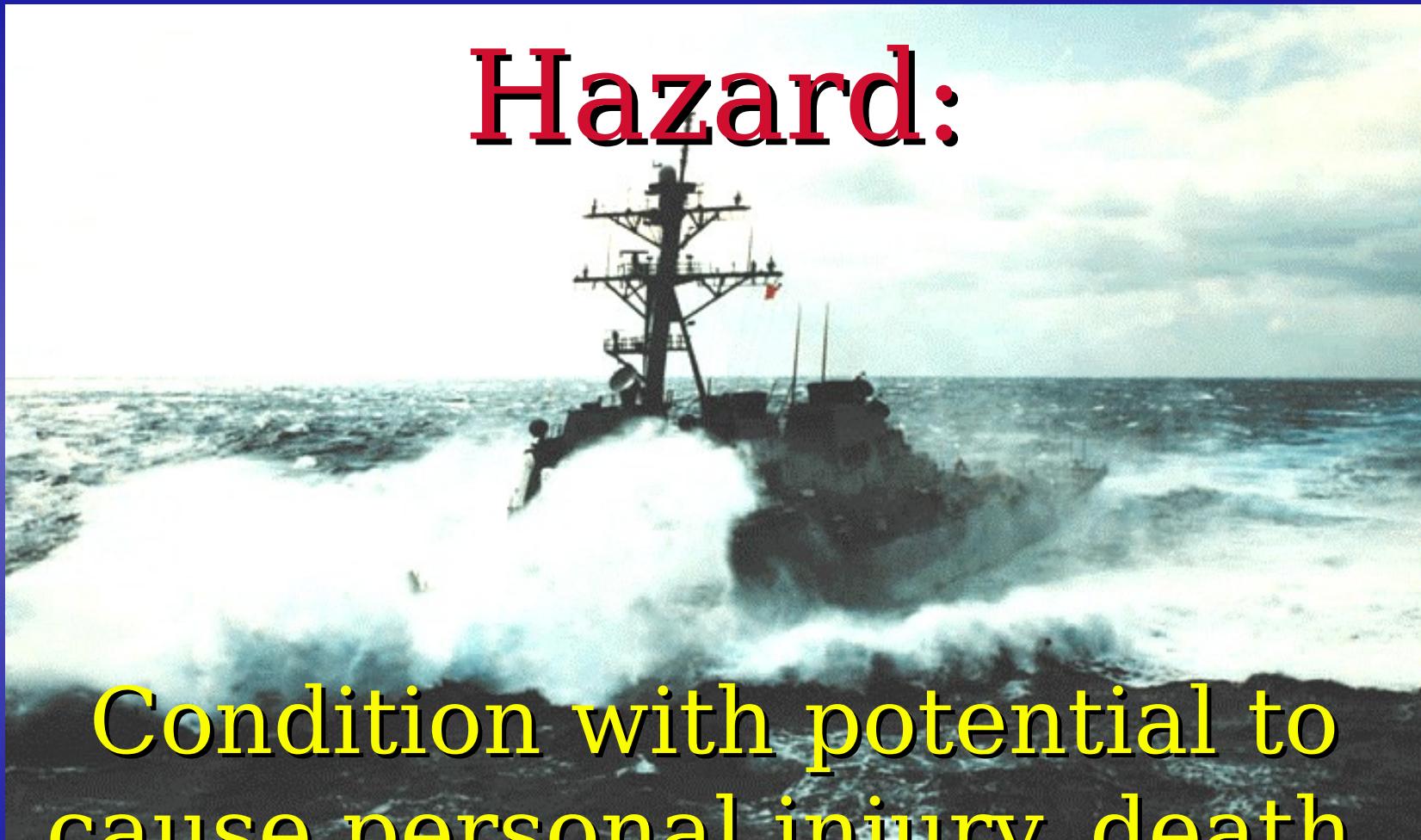
To optimize operational capability and readiness by managing risk to accomplish the mission with minimal loss.

ORM Terms



ORM Terms

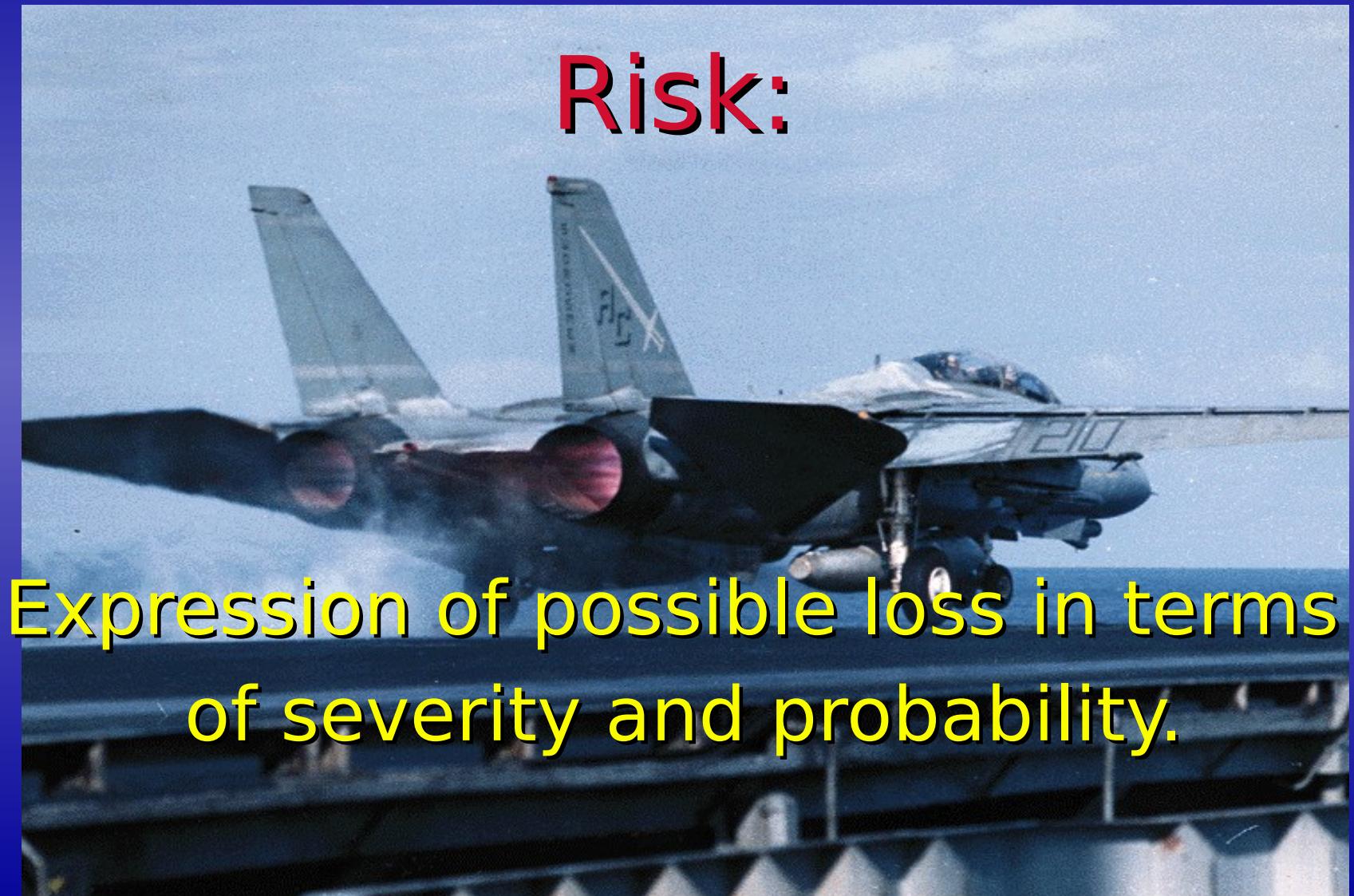
Hazard:



Condition with potential to cause personal injury, death, property damage, or mission degradation

ORM Terms

Risk:



Expression of possible loss in terms of severity and probability.

ORM Terms

Severity:

The worst
consequence which can occur
as a result of a hazard.

ORM Terms

Probability:

likelihood that a hazard will result in mishap or loss.

Hazard

Bad Weather

Flock of Birds

Walking on top
of Slippery AC

Risk

High Probability
Flight Ops Cnx

Moderate Chance
of Engine FOD

Some Chance of
Fall Producing
Severe Injury

ORM Terms

Risk Assessment:

The process of detecting hazards and assessing associated risks.

ORM Terms

Control:

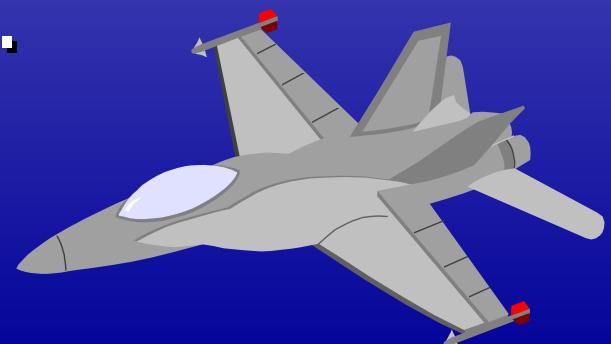
A method for reducing risk for an identified hazard by lowering the probability of occurrence, decreasing potential severity, or both.



ORM Terms

Operational Risk Management

The process of dealing with risk associated with military operations, which includes risk assessment, risk decision making, and implementation of effective risk controls.



Operational Risk Management Process

1. Identify Hazards
2. Assess Hazards
3. Make Risk Decisions
4. Implement Controls
5. Supervise

Causes of Risk

- * Change - The "Mother" of Risk
- * Resource Constraints
- * New Technology
- * Complexity
- * Stress

Risk

(Cont.)

- * Human Nature
- * High Energy Levels
- * Societal Constraints
- * Environmental Influences
- * Speed/Tempo of Operation

Four ORM Principles

1. Accept risk when benefits outweigh the cost.
2. Accept no unnecessary risk.
3. Anticipate and manage risk by planning.
4. Make risk decisions at the right level.

ORM vs. Traditional Approach

Systematic

Random, Individual-Driven

Proactive

Reactive

Integrates All Types of Risk Into Plan

Safety As After-thought Once Plan is Done

Common Process/Terms

Non-standard

Conscious Decision “Can Do” Regardless of Risk Based on Risk vs. Benefit

The Benefits of ORN

- > Reduction in Mishaps
- > Improved
Mission Effectiveness

Operational Risk Management

Levels of Application

- 1. Time-critical - On the run consideration of the 5 Step**
- 2. Deliberate - Application of the complete 5-Step Process**
- 3. In-depth - Complete 5-Step Process with Detailed Analysis**

ORM Implementation Concept

- Naval Aviation Leads The Way!
- Leverage the Army's Investment in ORM
- PHASE I: JUMP START for Operational Units
- PHASE II: CNATRA/FRS/FWS Pipeline Training
- PHASE III: CNET/CONTRACTOR Pipeline Training

ORM - Implementation Plan

- PHASE I: Jump Start for Operations
 - Naval Safety Center "Train the Trainer" Course
 - Senior Leader Training
 - Squadron Workshop Training

COMPLETE

ORM - Implementation Plan

- PHASE II: Long Term CNATRA - FRS - Pipeline Training
 - VT/HT Flight Instructor (user/adv)
 - Student API (indoc) and VT/HT (user)
 - FRS (user)
 - FWS/Type Wing/MAN/MAG (adv)
 - CO/XO ASC course (leader)

COMPLETED

Why do we need ORM

- USN & All other services decreasing in size
- Number of missions increasing
- Can not afford to sustain the losses we historically suffer during training

ORM IMPLEMENTATION STATUS

DOCTRINE: **Naval doctrinal Pub 1,3 & 5 FMFM - 1**

POLICY: **OPNAVINST 3500.39**

TRAINING:

- Naval Safety Center
- Naval Post Graduate School

ORM: WHERE ARE THE TRAINERS?

- CNAP: 31
- CNAL: 30
- CNARF: 17
- CNATRA: 44
- NAVAIR: 6
 - CNTWL, NWTSPM, NWTSC, VX-1, VX-9

**Some trainers have already
PCSed**

Your Next Mishap . . . Who, Not



- ★ Self-discipline
- ★ Leadership
- ★ Training
- ★ Standards
- ★ Support

**“Life is tough, but it’s
tougher if you’re
stupid”**

Sergeant John M.
Stryker, USMC, in
“The Sands of
Iwo Jima”

